



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR ARMAMENT CENTER (AFMC)
EGLIN AIR FORCE BASE, FLORIDA

September 10, 2001

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Florida DEP
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Subject: *Land Use Implementation Plan, Revision 1*
IRP Site No. OT-262 Cattle Dipping Vat – Auxiliary Field No. 4

Dear Sirs:

Enclosed please find Revision 1 of the *Land Use Implementation Plan Installation Restoration Program (IRP) Site No. OT-262 Cattle Dipping Vat – Auxiliary Field No. 4*, Eglin Air Force Base, Florida, dated September 10, 2001.

If you have any questions regarding this work plan, please contact Ms. Maria Rodriguez, Restoration Project Manager at (850) 882-7791 ext. 214.

Sincerely

A handwritten signature in dark ink, appearing to read "Thomas M. Churan", is written over a horizontal line.

THOMAS CHURAN, GM-13
Chief, Environmental Restoration

Attachments:
LUCIP, Revision 1
Distribution List

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DRAFT LAND USE CONTROLS IMPLEMENTATION PLAN
IRP SITE NO. OT-262 CATTLE DIPPING VAT—AUXILIARY FIELD NO. 4
EGLIN AIR FORCE BASE, FLORIDA

SITE LOCATION

Eglin Air Force Base, Florida (Eglin) is located within the Eglin Military Reservation in the Florida Panhandle. Installation Restoration Program (IRP) Site No. OT-262 Cattle Dipping Vat – Auxiliary Field No. 4 is located in southern Okaloosa County, Florida, approximately one mile north of Auxiliary Field No. 4 and approximately two miles northwest of Eglin Main Base (Figures 1 and 2). The site is situated within the south-central part of the Eglin Reservation. The approximate geographic coordinates of the site are 30°31'54" latitude and 86°34'46" longitude.

SITE DESCRIPTION

IRP Site No. OT-262 encompasses an approximately 0.2-acre area. It is located in a remote, wooded setting and is used infrequently by recreators and workers. The site has no fence or other barriers restricting access. A poorly maintained dirt road extending from Range Road 230 (located about 0.2 miles to the north) leads to the cattle dipping vat (Figure 3). Recreators and Eglin workers may infrequently pass along this road, but do not consistently perform any work (for example, mowing grass) at the site itself. The current land use at IRP Site No. OT-262 is nonresidential.

Several creeks are near IRP Site No. OT-262. The headwaters of Tom's Creek and Garnier Creek are located approximately 0.85 miles to the east and southeast of the site, respectively. In addition, Rogue and Longwood Knot Creeks are located about 1.5 miles to the north and southwest of the site, respectively. The area encompassing IRP Site No. OT-262 was wooded prior to range management activities in early 1998. The site is currently sparsely wooded, and ground cover consists of grasses, shrubs, and downed trees. The site ground surface is flat with sandy surface soils. The cattle dipping vat was located in a generally dry area of sandy soils, pine needles, and other organic matter. (Figure 3). No significant erosion features have been observed near the site.

The surficial aquifer beneath the site extends to an approximate depth of 95 feet below land surface (bls) (Hayes and Barr, 1983). The Pensacola Clay, an aquiclude which separates the surficial aquifer from the underlying Floridan aquifer system, is approximately 330 feet thick and extends to a depth of approximately 425 feet bls (Hayes and Barr, 1983; Maslia and Hayes, 1988). The surficial aquifer occurs under water table conditions. The depth to groundwater is approximately 36 to 41 feet bls. The groundwater flow directions within the surficial aquifer have a south-southeastern component towards Garnier Creek, which is located approximately 0.85 miles from the site.

IRP Site No. OT-262 consists of a former cattle dipping vat and the immediately surrounding area (Figure 4). The cattle dipping vat was demolished during Interim Corrective Measures (ICM) activities. The structure was constructed of concrete and exhibited cracks along its sides. The vat was 25 feet long by 3 feet wide and approximately 4 feet deep. A drip pad was not observed during RFI and ICM field activities. However, the slope of the northern wall of the vat and some sandstone cobbles noted at the same end indicate that the north end was the exit side of the vat. No standing water was observed inside

the vat and the northern third of the vat was partially filled with dirt, a palmetto bush, and brush. A poorly defined low area was noted approximately ten feet to the northeast. No evidence of a holding pen was distinguishable at the site.

Land Use Controls Objective

The ICM Report was submitted in December 1999 (Earth Tech, December 1999). On the basis of this work, Eglin recommends No Further Investigative Action with Land Use Controls (LUCs) for site surface and subsurface soils and No Further Investigative Action for site groundwater as the remedy at IRP Site No. OT-262.

To remain protective of human health and the environment, current and future use of the property will be limited, and no residential or other development of the property will be allowed without the proper engineering controls. The area affected by the residential restrictions is illustrated in Figure 4. Depending on the location, nature, and intensity of potential future land use activities, the Air Force shall conduct additional site investigation and assessment activities to determine the proper engineering controls if existing information is inadequate. In addition, LUCs will be implemented within the boundaries of this site, to ensure that surface and subsurface soils are not disturbed. The area affected by these land use restrictions is illustrated in Figure 4. This Land Use Controls Implementation Plan (LUCIP), once approved by the Environmental Protection Agency (EPA), and the ICM Work Plan submitted prior to the ICM excavation activities (REI, December 1998) will also serve as the Corrective Measures Implementation Plan (CMIP), as required to implement a remedy, pursuant to the Resource Conservation and Recovery Act (RCRA).

The following section outlines the proposed LUC implementation.

LUC Implementation to Achieve Objective

By separate Memorandum of Agreement (MOA) dated December 23, 1999, with EPA and the Florida Department of Environmental Protection (FDEP), Eglin, on behalf of the Department of the Air Force, agreed to implement basewide, certain periodic site inspection, condition certification and agency notification procedures designed to ensure the maintenance by Installation personnel of any site-specific LUCs deemed necessary for future protection of human health and the environment.

The Environmental Management Restoration (EMR) Division Chief will be responsible for implementing and maintaining the LUCs, and this LUCIP will be referenced in appropriate Eglin basewide planning documents. Section 4 of the *Land Use Controls Implementation Manual* describes implementation and maintenance procedures in detail.

For Eglin IRP Site No. OT-262 Cattle Dipping Vat—Auxiliary Field No. 4, the remedy is LUCs for surface and subsurface soils, which consists of the following land use restrictions:

- The property is restricted from residential development, without proper engineering controls (Figure 1 and Section 4.1.2 of the *Land Use Controls Implementation Manual* [CH2MHill, 2001]). The implementing agency will have the opportunity to review and comment on the proposed engineering controls.

- The property will be inspected annually to ensure that unauthorized use of the property does not occur and that the status of the property is unchanged (Section 4.3.1.1 of the *Land Use Controls Implementation Manual* [CH2MHill, 2001]). The IRP Site No. OT-262 Land Use Controls Annual Inspection Checklist is included as Attachment A.
- No digging will be allowed within the area of IRP Site No. OT-262 (Figure 4) without an Air Armament Center (AAC)/EMR and Eglin Bioenvironmental Engineering approved safety and health plan.
- Signs will be posted at the site and will present applicable restrictions with a minimum of two-inch block lettering, in English, made with reflective material (Section 4.2.1.3 of the *Land Use Controls Implementation Manual* [CH2MHill, 2001]). Signs will have a point of contact, phone number, and have the IRP site number displayed as a reference number for any inquires on the site and its restrictions. The restricted media (surface and subsurface soils) will be stated on the signs. Universal restriction symbols may be utilized. The specific risk will be posted and a statement such as "Removal of this sign can only be authorized through coordination with the point of contact posted" will be included.
- The Air Force will notify the implementing agency upon the discovery of any unauthorized change in land use (Section 4.3.1.2 of the *Land Use Controls Implementation Manual* [CH2MHill, 2001]).
- Annual reporting of the site status is required. The annual report will be submitted by July 1 of each year.
- Every five years, Eglin will prepare a review of the remedy effectiveness and submit the report to the implementing agency. Eglin may at any time present additional information for remedy modification, including but not limited to discontinuing the remedy.

For requests for major land use changes, written requests will be submitted to the implementing agency, in accordance with the mutually approved Land Use Control Action Plan. Requests will be submitted at least sixty days (except in emergency situations) prior to implementation of any major change in land usage.

These LUCs will be documented in the Eglin Basewide Comprehensive Plan on an annual basis (Section 4.3.2 of the *Land Use Controls Implementation Manual*).

Annual Reporting

The annual report for combined LUCIP sites will consist of a one-page cover letter signed and approved by the Installation Commander. The report will state that all sites are being monitored and maintained in accordance with the Memorandum of Agreement signed by the Florida Department of Environmental Protection, the United States Environmental Protection Agency and representatives of the United States Air Force. An attachment to the letter will list sites inspected with the date of the inspection and any discrepancies and corrective actions implemented. The letter report will be submitted by July 1 of each year.

Recurrent Review of Land Use Controls

The five-year review of LUCs will be conducted to determine if it is appropriate to amend or remove the LUCs. At each review interval, the EMR representative will determine if site conditions warrant LUC removal or amendment consideration. If so, requirements for investigation and assessment activities will be based on a Human Health Risk Assessment (HHRA) and will be pre-approved by the designated responsible entity. If the review indicates the LUCs should be amended or removed, a Revalidation Report will be submitted for EPA and FDEP review.

Decision Documents

The Statement of Basis (SB) dated June 2001 recommended No Further Investigative Action with LUCs. The SB was open for public comment period from June 15, 2001 to July 31, 2001. No comments were received during the specified comment period.

REFERENCES

- CH2MHill, *Installation Restoration Program Final Land Use Controls Implementation Manual*, Eglin Air Force Base, Florida, September 2001.
- Earth Tech, *RCRA Facility Investigation and Interim Corrective Measures Report, IRP Site No. OT-262 Cattle Dipping Vat – Auxiliary Field No. 4*, December 1999.
- Earth Tech, *Statement of Basis IRP Site No. OT-262 Cattle Dipping Vat—Auxiliary Field No. 4*, Revision 2, Eglin Air Force Base, Florida, June 2001.
- Hayes, L.R. and Barr, D.E., *Hydrology of the Sand-and-Gravel Aquifer, Southern Okaloosa and Walton Counties, Northwest Florida*, US Geological Survey, Water Resources Investigations Report 82-4110, 1983.
- Maslia, M.L. and Hayes, L.R., *Hydrology and Simulated Effects of Ground-Water Development of the Floridan Aquifer System, Southwest Georgia, Northwest Florida and Southernmost Alabama*, US Geological Survey, Professional Paper 1403-H, 1988.
- REI, *RCRA Facility Investigation and Interim Corrective Measures Work Plan, IRP Site No. OT-262 Cattle Dipping Vat – Auxiliary Field No. 4*, December 1998.
- U.S. Environmental Protection Agency, Memorandum to Federal Facilities Branch, *Subject: Assuring Land Use Controls at Federal Facilities*, 1998.
- Woodward-Clyde Consultants, *Cattle Dipping Vat Assessment Program, A Summary Report*, January 1995.

ATTACHMENT A

**IRP SITE NO. OT-262 LAND USE CONTROLS
ANNUAL INSPECTION CHECKLIST**

IRP SITE NO. OT-262 LAND USE CONTROLS ANNUAL INSPECTION CHECKLIST

DATE _____

DATE OF PREVIOUS INSPECTION _____

TIME _____

DATE OF NEXT PERIODIC REVIEW _____

NAME _____

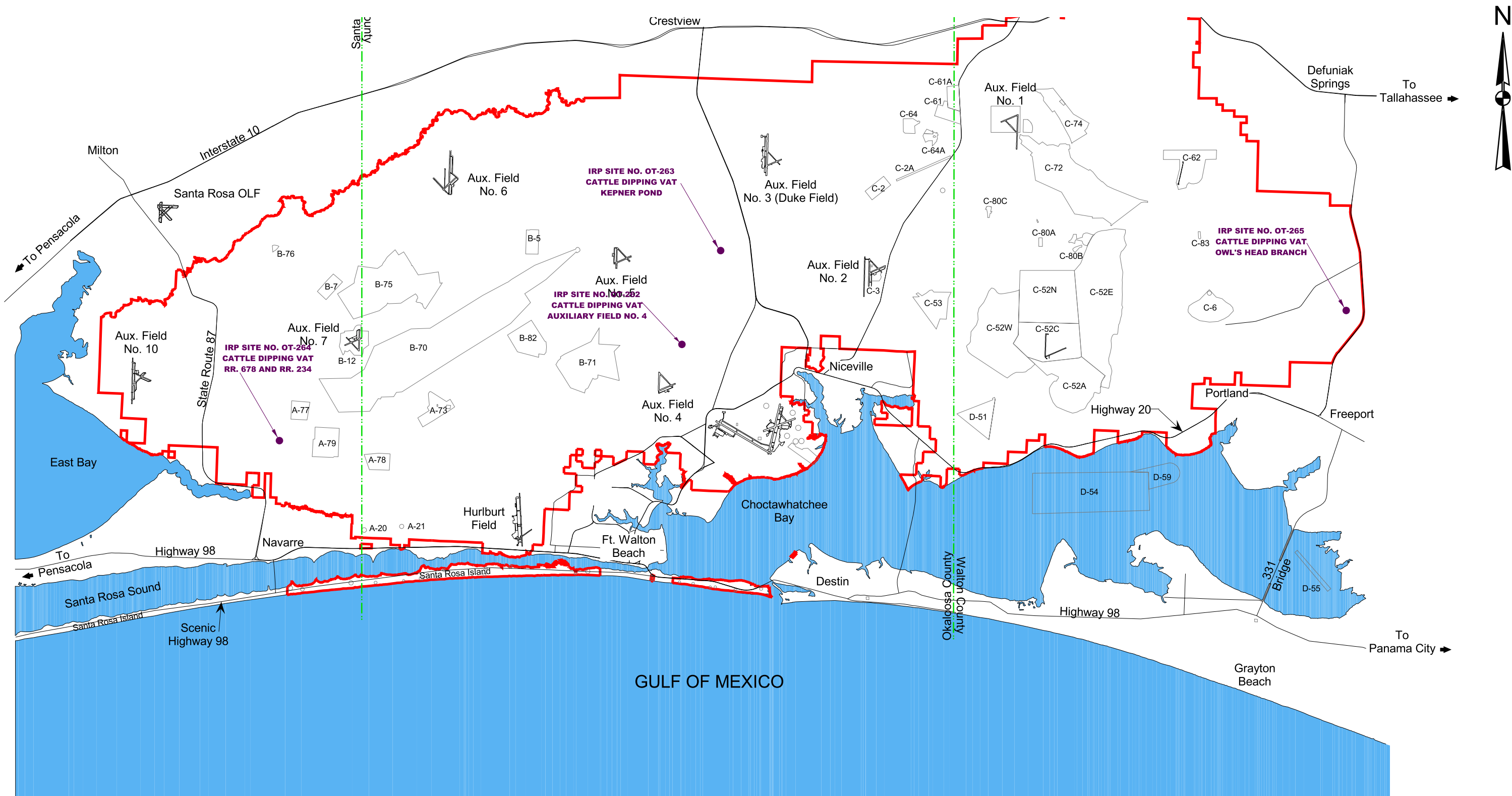
If the answer to any of the following questions deviates from the prescribed LUC, please describe and explain on the attached comment sheet.

Land Use Controls	Inspection
The property is restricted from residential development, without proper engineering controls (Figure 4 and Section 4.1.2.1 of the Land Use Controls Implementation Manual).	<p>Figure 4 depicts residential development restrictions. Has any residential development occurred within the restricted area?</p> <p>Yes No</p> <p>If the answer is yes, please describe in detail.</p>
Future development will be restricted from using the shallow aquifer under the site as a source of potable drinking water (see Figure 4 and Section 4.2.1 of the Land Use Controls Implementation Manual). The shallow aquifer is defined as the Sand and Gravel aquifer above the Pensacola Clay confining layer. Other uses of the groundwater must be approved by the implementing agency.	<p>Figure 4 depicts shallow aquifer use restrictions.</p> <p>Are domestic use wells completed into the shallow aquifer within the restricted area?</p> <p>Yes No</p> <p>Has groundwater within the restricted area been utilized?</p> <p>Yes No</p> <p>If the answer is yes to either of these questions, please describe in detail.</p>
This property will be inspected annually to ensure that unauthorized use of the property does not occur and that the status of the property is unchanged (Section 4.3.1.1 of the Land Use Controls Implementation Manual).	<p>Did any unauthorized land use changes occur in the past year?</p> <p>Yes No</p> <p>Were any major land use changes* requested, since the last inspection report?</p> <p>Yes No</p> <p>If the answer is yes to either of these questions, please describe in detail.</p>

The Air Force will notify the implementing agency upon the discovery of any unauthorized change in land use (Section 4.3.1.2 of the Land Use Controls Implementation Manual).	If any unauthorized change in land use occurred, on what date was the current regulatory authority notified?
Annual reporting of the site status is required. The annual report will be submitted by July 1 of each year.	<p>Was an annual report submitted to the current regulatory authority(ies) by July 1? Yes No</p> <p>Have all discrepancies from previous reports been addressed? Yes No</p> <p>If the answer is no to either of these questions, please describe in detail.</p>
For requests for major land use changes*, written requests will be submitted to the current regulatory authority(ies), in accordance with the mutually approved LUCAP. Requests will be submitted as soon as a major land use change is anticipated, to allow sufficient time for regulatory review and amendments to remedy selection decision documents.	<p>Have any major land use changes requested since the last inspection report? Yes No</p> <p>If the answer is yes, please describe in detail.</p>
These Land Use Controls will be documented in the Eglin Basewide Comprehensive Plan on an annual basis (Section 4.3.2 of the Land Use Controls Implementation Manual).	<p>Have the Land Use Controls been documented and distributed in accordance with Section 4.3.3 of the Land Use Controls Implementation Manual? Yes No</p> <p>If the answer is no, please provide explanation.</p>

*Major Land Use Change = Any changes in land use (e.g., from industrial or recreational to residential) that would be inconsistent with those specific exposure assumptions in the human health and/or ecological risk assessments that served as the basis for the LUCs; any site activity that may disrupt the effectiveness of the implemented LUC (for example, excavation at a landfill; groundwater pumping that may impact a groundwater pump and treat system; a construction project that may impact ecological habitat protected by the remedy; removal of a fence; unlocking of a gate, or removal of warning signs); or any site activity intended to alter or negate the need for the specific LUCs implemented at the site.

FIGURES



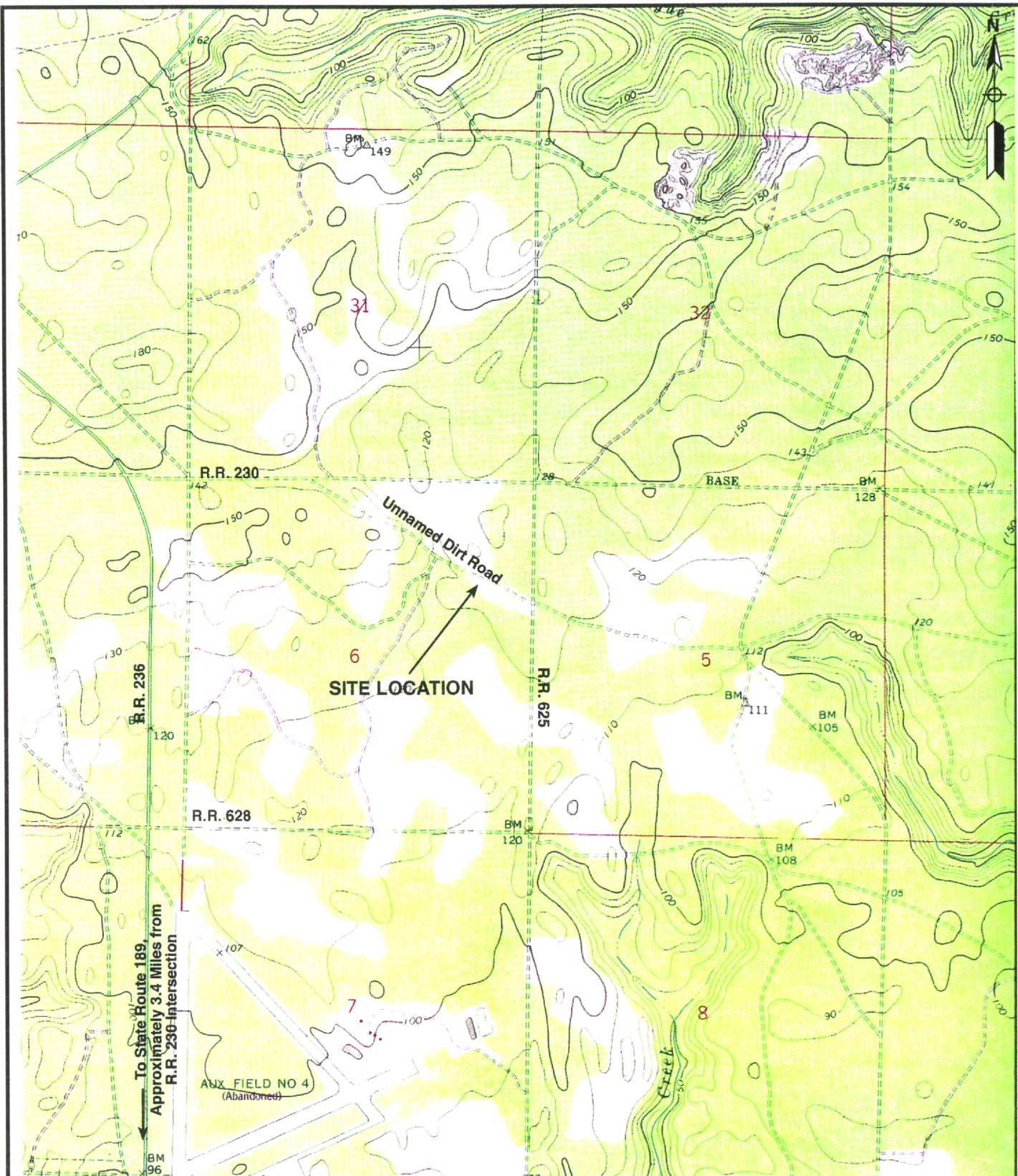
Legend

- Eglin AFB Reservation Boundary
- Highways
- D-51 Eglin AFB Test Area
- County Line

4 0 4 8 12 Miles

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FIGURE 1.0
IRP SITE NO. OT-262 THROUGH OT-265
CATTLE DIPPING VAT
SITE LOCATION MAP
EGLIN AIR FORCE BASE, FLORIDA
PROJECT NO. 40532



Scale 1:24000

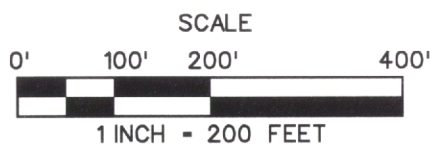
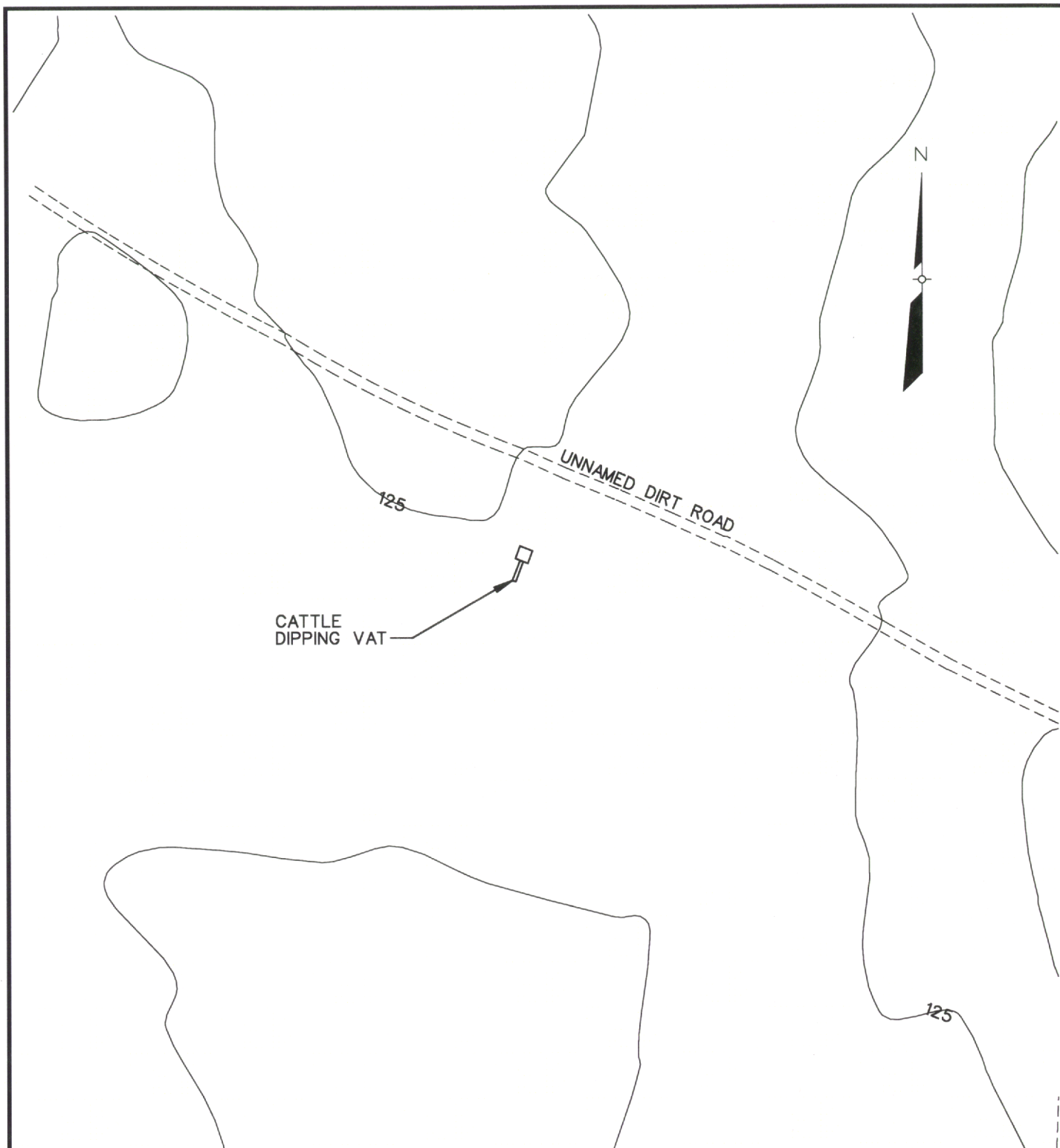
0 1000 2000 3000 4000 5000 6000 FT.

CONTOUR INTERVAL = 10 FEET

Ref.: U.S.G.S., 7.5 min Quadrangle
Valparaiso, FL. 1970, PR 1987.

EARTH  TECH
A **tyco** INTERNATIONAL LTD. COMPANY

FIGURE 2
IRP SITE NO. OT-262
CATTLE DIPPING VAT -
AUXILIARY FIELD NO. 4
SITE AND VICINITY MAP
EGLIN AIR FORCE BASE, FLORIDA
PROJECT NO. 55556.000

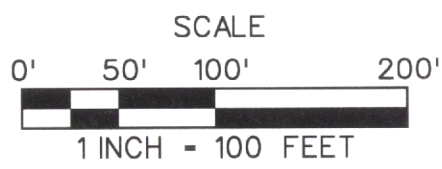
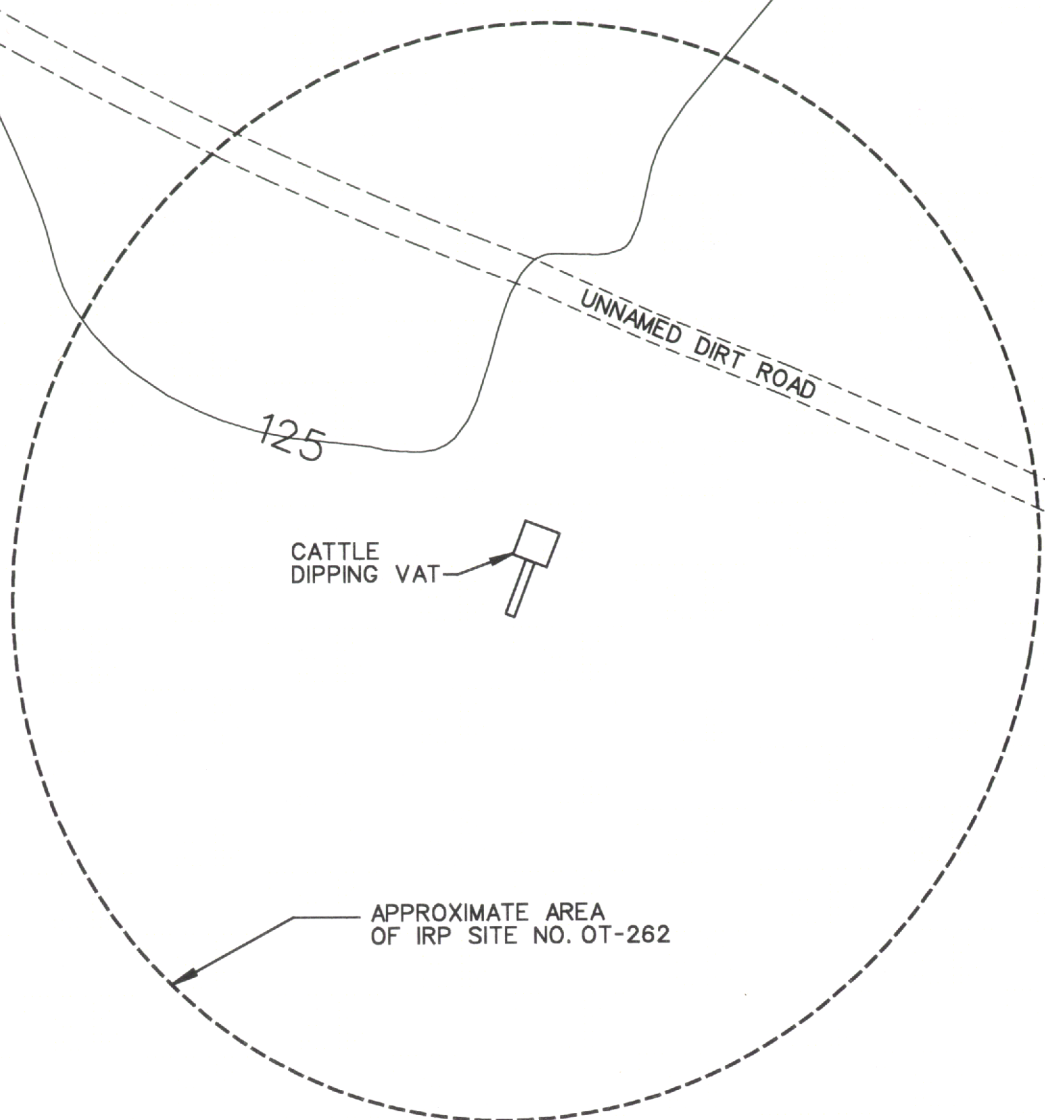


BASE MAP PRODUCED FROM BASE COMPREHENSIVE PLAN
MAPPING, US ARMY ENGINEERING DISTRICT, MOBILE,
AERIAL PHOTO DATES: DECEMBER 25 & 26, 1993.
CONTOUR INTERVAL - 5 FEET.

E A R T H  T E C H

FIGURE 3
IRP SITE NO. OT-262
CATTLE DIPPING VAT-AUXILIARY FIELD NO. 4
SITE LAYOUT MAP

EGLIN AIR FORCE BASE, FLORIDA
PROJECT NO. 40532



BASE MAP PRODUCED FROM BASE COMPREHENSIVE PLAN
MAPPING, US ARMY ENGINEERING DISTRICT, MOBILE,
AERIAL PHOTO DATES: DECEMBER 25 & 26, 1993.
CONTOUR INTERVAL = 5 FEET.



FIGURE 4
IRP SITE NO. OT-262
CATTLE DIPPING VAT-AUXILIARY FIELD NO. 4
LUCIP RESTRICTIONS
EGLIN AIR FORCE BASE, FLORIDA
PROJECT NO. 40532